Clariant Corporation
4000 Monroe Road
Charlotte, NC 28205
704.331.7000

Clariant

Erin Russell
Writer's Direct Dial No.: 704/331-7059
Fax No.: 704/331-7131
E-Mail: erin.russell@clariant.com

COMPANY SANITIZED – DOES NOT CONTAIN CONFIDENTIAL BUSINESS INFORMATION

June 4, 2004

VIA US MAIL
Thomas T. Olivier
Senior Enforcement Counsel
EPA New England, Region 1
1 Congress Street, Suite 1100 (SEL)
Boston MA 02114-2023

Re: Request for Authorization to Return Pigment Product
[ ] Mexico to Coventry, RI

Dear Mr. Olivier:

Clariant Corporation ("Clariant') is requesting that the US EPA grant an authorization for Clariant to return contaminated pigment product previously shipped to Mexico back to Clariant's Coventry manufacturing facility. As you know from our ongoing discussions, the Clariant Coventry, Rhode Island facility manufactured a number of batches of red pigment that contained elevated levels of inadvertently generated PCBs. The product was shipped to the [ ] facility in [ ], Mexico in the form of a wet press-cake. It is currently stored, primarily still in the press-cake form, pending resolution of its disposition. Several batches are dried and stored as powder pigment product. I have attached a spreadsheet identifying the batches stored in Mexico, the PCB level in each batch and the weight of each batch.

Clariant makes this return authorization request of EPA for several reasons. First, there is no appropriate facility in Mexico to handle disposal of the contaminated pigments. Clariant, and its US waste disposal contractor have thoroughly investigated disposal options in Mexico and have found none. Clariant would like to reprocess the pigments pursuant to and upon approval of the detailed plan submitted by John Paul (Clariant, Coventry RI) to Ms. Kim Tisa. The reprocessing of the pigment product would result in waste minimization due to the resulting segregation and volume reduction of the contaminated portion. Further, it allows for salvage of the useful product. Clariant would dispose of waste from this process in accordance with applicable laws. In the event that reprocessing would not be an option, the PCB contaminated pigment product would be disposed of in accordance with applicable laws.

Clariant

Clariant would ensure that product was transported in accordance with the regulatory requirements. Please let me know additional information we can provide to assist in your review of this request.

Sincerely,

Erin Russell

Enclosure
c: Mike Teague
John Paul

COMPANY SANITIZED – DOES NOT CONTAIN CONFIDENTIAL BUSINESS INFORMATION

Clariant Red Pigment - Mexico			
Product	batch number	PCB (PPM)	Updated Inventory KGS.
Red 214	62313816	694	352.0
Red 214	62313817	249	443.5
Red 214	USEA000221	171	552.1
Red 214	USEA000222	382	401.5
Red 214	USEA000223	183	428.2
Red 214	USEA000372	180	446.6
Red 214	USEA000373	246	521.3
Red 214	USEA000374	304	478.8
Red 214	USEA000375	229	457.9
Red 214	US62253712	255	84.3
Red 214	Blend	319	1940.0
Total Red 214			6106.2
Red 144	US62254103	606	227.2
Red 144	US62313707	590	83.2
Red 144	USEA000232	240	674.0
Red 144	USEA000233	501	604.4
Red 144	USEA000234	475	662.4
Red 144	USEA000235	101	608.3
Red 144	USEA000238	100	744.2
Red 144	USEA000239	35	616.4
Red 144	USEA000240	99	760.3
Total Red 144			4980.4
Red 214 blend	MXSC313502	415	27.0
Total in Mexico			11113.6

Clariant Corporation

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Clariant

Erin Russell
Writer's Direct Dial No.: 704/331-7059
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E-Mail: erin.russell@clariant.com

June 4, 2004

VIA FEDERAL EXPRESS
Ms. Rose Toscano
Document Control Officer
EPA New England, Region 1
1 Congress Street, Suite 1100
Boston MA 02114-2023

Re: Clariant Corporation Supplemental Information for Mr. Thomas T. Olivier

Dear Ms. Toscano:

Please find one confidential copy and three company sanitized copies of the following document:

1. Correspondence dated June 4, 2004 from Erin Russell to Thomas T. Olivier.

Please feel free to contact me if any further information is needed regarding this submittal.

Sincerely,

Erin Russell

Erin Russell

c: Mike Teague
John Paul

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL
Return Receipt 7002 0860 0000 6591 2141

June 2, 2004

Michael A. Teague, Ph.D.
Vice President / ESHA
Clariant Corporation
4000 Monroe Road
Charlotte, North Carolina 28205

Re: Proposed Conceptual Site Model for Red Pigments 214 and 414

Dear Dr. Teague:

This is in response to your April 30, 2004 letter regarding a proposed approach for assessing potential exposure risks associated with the use of Clariant Red Pigments 214 and 414. The proposed approach includes the development of a work plan for EPA's review and approval, that will assist in the development of a Conceptual Site Model for these pigments. A description of the proposed approach was provided via an attached letter from BBL Sciences, Inc, who you have selected to assist you with this project. In your letter, you request EPA's concurrence on this approach.

EPA has reviewed your request and the proposed approach provided by BBL and agrees that given the complexity and importance of this project, that the proposed approach is reasonable. As you acknowledge in your letter, this is a high priority project and EPA expects Clariant to submit its work plan as soon as possible so that the assessment can proceed.

Should you have any questions regarding this, please feel free to call me at (617)918-1527.

Sincerely,

Kimberly N. Tisa, PCB Coordinator
Office of Ecosystem Protection

cc: T. Olivier, EPA
M. Millette, EPA
L. Cassey, EPA-HQ

Clariant Corporation

4000 Monroe Road
Charlotte, NC 28205
704.331.7000

Clariant

Erin Russell
Writer's Direct Dial No.: 704/331-7059
Fax No.: 704/331-7131
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June 4, 2004

VIA FEDERAL EXPRESS
Ms. Rose Toscano
Document Control Officer
EPA New England, Region 1
1 Congress Street, Suite 1100
Boston MA 02114-2023

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Sincerely,

Erin Russell

Erin Russell

c: Mike Teague
John Paul

Clariant Corporation
4000 Monroe Road
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704.331.7000

Erin Russell
Writer's Direct Dial No.: 704/331-7059
Fax No.: 704/331-7131
E-Mail: erin.russell@clariant.com

COMPANY SANITIZED – DOES NOT CONTAIN CONFIDENTIAL BUSINESS INFORMATION

June 4, 2004

VIA US MAIL
Thomas T. Olivier
Senior Enforcement Counsel
EPA New England, Region 1
1 Congress Street, Suite 1100 (SEL)
Boston MA 02114-2023

Re: Request for Authorization to Return Pigment Product
[ ] Mexico to Coventry, RI

Dear Mr. Olivier:

Clariant Corporation ("Clariant') is requesting that the US EPA grant an authorization for Clariant to return contaminated pigment product previously shipped to Mexico back to Clariant's Coventry manufacturing facility. As you know from our ongoing discussions, the Clariant Coventry, Rhode Island facility manufactured a number of batches of red pigment that contained elevated levels of inadvertently generated PCBs. The product was shipped to the [ ] facility in [ ], Mexico in the form of a wet press-cake. It is currently stored, primarily still in the press-cake form, pending resolution of its disposition. Several batches are dried and stored as powder pigment product. I have attached a spreadsheet identifying the batches stored in Mexico, the PCB level in each batch and the weight of each batch.

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Clariant

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Sincerely,

Erin Russell

Enclosure
c: Mike Teague
John Paul

COMPANY SANITIZED – DOES NOT CONTAIN CONFIDENTIAL BUSINESS INFORMATION

Clariant Red Pigment - Mexico			
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Red 144	USEA000240	99	760.3
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Red 214 blend	MXSC313502	415	27.0
Total in Mexico			11113.6

Clariant Corporation

4000 Monroe Road
Charlotte, NC 28205
704.331.7000

Clariant

Erin Russell
Writer's Direct Dial No.: 704/331-7059
Fax No.: 704/331-7131
E-Mail: erin.russell@clariant.com

May 21, 2004

VIA US MAIL
Thomas T. Olivier
Senior Enforcement Counsel
EPA New England, Region 1
1 Congress Street, Suite 1100 (SEL)
Boston MA 02114-2023

Re: Clariant Corporation Waiver of Conflict
Versar Environmental Risk Management Inc.

Dear Mr. Olivier:

I am writing to confirm our conversation concerning Versar Environmental Risk Management Inc.'s ("Versar") participation in risk assessment activities related to Clariant's PCB issue currently under review by the U.S. EPA. From Clariant's perspective there is no direct or indirect conflict at issue with this work. Clariant has had no contractual, formal or other relationship with Versar. To the extent a conflict exists, Clariant waives such a conflict for the work by Versar on the risk assessment for PCB issues related to Clariant's pigments.

Versar has performed some related industrial hygiene sampling work for a customer of Clariant. It is my understanding that this work was composed of a single site visit and associated sampling. Clariant's customer, CFC International Inc., through their Executive Vice President and CFO Dennis Lakomy, has indicated to Clariant that they have no objection to Versar's work on this issue on behalf of the US EPA. Clariant does not have the authority to provide a waiver on behalf of CFC, however I wanted to be sure this related information was provided.

Please let me know if you need this information documented in any other manner. I hope this clarifies matters with regard to Versar.

Sincerely,

Erin Russell

Erin Russell

c: Mike Teague
John Paul

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

BY CERTIFIED MAIL - RETURN RECEIPT REQUESTED

IN THE MATTER OF:	)	**TOXIC SUBSTANCES CONTROL ACT SUBPOENA**
General Color Bridge Street Minerva, OH 44657	)	

Attn: Earl Breeze, Technical Manager

Re: Red Pigments (PV Fast Red 3B and PV Fast Red BNP) Purchased from Clariant of Coventry, Rhode Island

By this subpoena, EPA is requiring you to submit information concerning Red Pigments (PV Fast Red 3B and PV Fast Red BNP) you received from Clariant Corporation of Coventry, Rhode Island ("Clariant"), that may have contained PCBs. Section 11(c) of TSCA, 15 U.S.C. § 2610(c), authorizes EPA to issue subpoenas requiring the submission of information on chemical substances such as PCBs.

Unless otherwise stated in any of the following numbered paragraphs, the "Facility" means your facility at Bridge Street, in Minerva, Ohio. Any reference to the "Products" constitutes a reference to the Red Pigments in question. Any reference to a "Facility Product" constitutes a reference to any product your facility manufactures, distributes or sells incorporating the Products. Each of the following information requests covers the shipments of Products made by Clariant on August 30, 2002, October 2, 2002, and February 20, 2003 to your Facility. You are required to provide the following information within thirty (30) calendar days from the date of receipt of this subpoena:

1. If your Facility processes the Products, including but not limited to repackaging, batching or blending, provide a description of the processing. If the processing includes batching or blending of the Products, the description should include the batching and/or blending ratios and any PCB analytical data associated with this processing.

2. For each shipment of Products received or further processed, provide a description of the end use of the Products. The description should include dilution factors and any analytical data collected on PCB concentrations.

3. A list of your customers who received the Products or any Facility Product. For each customer, provide the following information: the customer name, address, point of contact,

phone number, and quantities and dates sold. For any Products or Facility Product sold and recovered from your customers, provide the quantities and dates recovered.

Submit all information required above to the following address:

U.S. Environmental Protection Agency
Office of Environmental Stewardship
One Congress Street, Suite 1100 (Mail Code SEP)
Boston, MA 02114-2023
Attention: Marianne Milette, PCB Enforcement Coordinator

Please be aware that if you do not provide the requested information or explain in writing why you cannot provide the requested information in the time allowed, EPA may seek a court order requiring you to comply and may assess monetary penalties under Section 16 of TSCA. Federal law also establishes criminal penalties for falsifying information provided to EPA. If you wish to claim some or all of the information you submit as confidential, you must follow the procedures described in EPA's regulations at 40 C.F.R. Part 2, Subpart B. Any information that is not claimed as confidential may be released to the public under the Freedom of Information Act without further notice to you.

This subpoena is not subject to the Paperwork Reduction Act.

EPA Contacts

For any technical questions regarding this subpoena, you should contact either Marianne Milette at (617) 918-1854 or Kimberly Tisa at (617) 918-1527. For legal matters, have your attorney contact Thomas Olivier, Senior Enforcement Counsel, at (617) 918-1737.

Robert W. Varney

Date: January 23, 2004

Robert Varney, Regional Administrator
U.S. Environmental Protection Agency
Region I - New England

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 Congress Street, Suite 1100
BOSTON, MA 02114-2023

CERTIFIED MAIL

October 26, 2004

Michael A. Teague, Ph.D.
Vice President / ESHA
Clariant Corporation
4000 Monroe Road
Charlotte, North Carolina 28205

Re: Conceptual Exposure Model and Preliminary Assessment for End Users of Pigment Red 144 and 214, August 31, 2004

Dear Dr. Teague:

This is in response to your August 31, 2004 submittal which defines a Conceptual Exposure Model for assessing potential exposure risks associated with the use of Clariant Pigments Red 144 and 214.

EPA's contractor, Versar, has completed its review of this submittal. Versar's comments are attached. While the Conceptual Exposure Model appears thorough and no substantial omissions were identified, Versar's comments must be incorporated into the comprehensive risk assessments.

Given that no major revisions to the Exposure Model appear to be needed, EPA expects Clariant to proceed as soon as possible with the comprehensive assessments. Accordingly, EPA requests that Clariant provide its estimated schedule for completion of these assessments within 7 days of receipt of this letter.

Should you have any questions, please call me at (617) 918-1527 or by e-mail at tisa.kimberly@epa.gov.

Sincerely,

Kimberly N. Tisa, PCB Coordinator
Office of Ecosystem Protection

cc: T. Olivier, EPA
M. Milette, EPA

attachment

Versar inc.

MEMORANDUM

TO: Laura Casey

cc: James Buchert
1126.1000.001.01 file

FROM: Diane Sinkowski

DATE: October 25, 2004

SUBJECT: Review of *Conceptual Exposure Model and preliminary Assessment for End Users of Pigment Red 144 and 214* (August 31, 2004)

I have reviewed the submitted assessment approach and exposure route and pathway dendograms. The diagrams provide a thorough preliminary estimate of the potential pathways associated with exposure to PCBs in industrial and consumer end-use products.

I just have the following brief comments:

- The dendograms show that for consumers, exposure to PCBs could potentially occur from skin contact with and ingestion of PCBs found in surface dust. I want to make certain that, the exposure assessment considers the transfer of PCBs embedded in the material that are available at the surface of a manufactured item to skin contacting that surface. (A material does not necessarily have to produce particulates (i.e., dust) to have PCBs become available.) Similar to surface dust, some of the available PCBs in the material that adhere to the skin are inadvertently ingested from hand-to-mouth activity.

- Also, if releases from production activities are found to affect soil, then inhalation of fugitive dust should be considered as an exposure pathway.

Please call if you have any questions or need additional information.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 15, 2003

Erin S. Russell
Senior Counsel
Clariant Corporation
4000 Monroe Road
Charlotte, NC 28205

Dear Ms. Russell:

EPA appreciates Clariant Corporation's (Clariant) cooperation and initiative in addressing the PCB issues involving your Pigment Red 144 and Pigment Red 214 (hereinafter "the products") manufactured at your Coventry, Rhode Island site. As discussed in our meeting on October 14, 2003, EPA identified the following information that needs to be provided by your company. The information provided should cover the period from August 2001 to the present.

1. A list of your customers who received the products in question and customers to whom they have distributed the products. For each customer, provide the following information: the customer name, address, point of contact, phone number, quantities and dates sold, and end use of the products, if known.

2. Documentation of the health and safety procedures used during the manufacturing, processing and distribution of these products at your Coventry facility. Include any environmental sampling that may have been conducted.

3. Analytical data collected on PCB concentrations in the intermediate and final stages of the product manufacturing process during the initial lab bench scale testing.

4. Analytical data collected on PCB concentrations of the intermediate and final stages of the product manufacturing process during the actual manufacturing process and during the quality assurance audit.

5. Documentation of activities conducted to date following determination that PCBs had exceeded 50 parts per million in the products. This should include information regarding handling, storage, marking, etc. of the products and decontamination efforts, if applicable.

Please submit all information required above to the following address:

Marianne Milette (SEP)
U.S. Environmental Protection Agency
One Congress Street, Suite 1100
Boston, MA 02114-2023

The above information must be submitted to EPA within 20 business days of receipt of this letter. Should Clariant require additional time to produce this information, please contact me.

If you wish to claim some or all of the information you submit as TSCA Confidential Business Information (CBI), you must follow the procedures described in EPA's regulations at 40 C.F.R. Part 2, Subpart B. For any response that is claimed CBI, also include three sanitized versions.

For any questions regarding this request, you should contact me at (617) 918-1854 or Kim Tisa at (617) 918-1527.

Sincerely,

Marianne Milette
PCB Enforcement Coordinator
USEPA

cc: John Paul, Clariant
Michael Teague, Clariant
Kim Tisa, EPA
Catherine Smith, EPA

Clariant Corporation
Responses 2 through 5
November 17, 2003

Question 2 *Documentation of Health and Safety procedures used during the manufacturing, processing and distribution of these products at your Coventry facility. Include any environmental sampling that may have been conducted.*

The Coventry facility has site-wide general Health and Safety procedures as well as procedures that are specific to individual activities. Both types of procedures apply to the production of the Pigment Red 144 and Red 214 and copies are attached.

Two general procedures, that are responsive to your request, cover this process. The Respiratory Protection Program is attached as Q2-1. The Personal Protective Equipment (PPE) program is attached as Q2-2.

Activity specific procedures also apply to this manufacturing process. The PPE requirements for these materials in the Azo building, where the first step of the process occurs, are covered in several documents. Item Q2-3 is an excerpt from the PPE assessment for all materials handled in the Azo building. As seen from the document, when handling powder, the PPE required includes PVC gloves, hard hat, safety glasses, steel toe shoes, hearing protection, N 95 Dust Mask, and a white tyvek suit w/ hood.

The PPE requirements for the HPP building, where the second step of the process takes place are listed in each step of the process. An excerpt of that procedure is included as item Q2-4. The employee Right to Know (RTK) training for this material is attached as Item Q2-5. Item Q2-6 is the modified RTK training including information on PCBs.

No related environmental sampling was conducted during the August 2001 to September 2003 timeframe.

Question 3 *Analytical data collected on PCB concentrations in the intermediate and final stages of the product manufacturing process during the initial lab bench scale testing.*

The Coventry Site uses a procedure called NPPI (New Product and Process Introduction) to manage the introduction of products to the site. Additionally, the site would use the experiences of Clariant companies in other countries in its process evaluation. The data collected during this process includes: the lab scale testing of the intermediate, DAZN, and the final product, Red 214.

This table of data contains the lab scale testing that was completed on the processes. The data is limited, as it confirmed the expected results, based on production information from Europe, that PCBs are formed at low levels in the DAZN manufacture, with no additional PCB generation in the second step.

Sample number	material	result	reference
10840	DAZN	<1 ppm	Q3-1
10841	DAZN	<1 ppm	Q3-1
1726-85	214	12.74	Q3-2
1726-85	214	1.8	Q3-2
1726-154	214	1.49	Q3-2
1726-154	214	6.5	Q3-2
1724-106-1	DAZN	7.61	Q3-2
1724-106-1	DAZN	8.3	Q3-2
1724-106-2	DAZN	9.27	Q3-2
1724-106-2	DAZN	6.8	Q3-2

This data confirmed discussions between the US director of operations and his counterpart in France, that there are only very low levels of PCBs in the pigment. The duplicate sample results are part of an effort to compare 2 different laboratories. The labs used the DCMA digestion method of sample prep and used GC/MS for the analysis.

Question 4 *Analytical data collected on PCB concentrations in the intermediate and final stages of the product manufacturing process during actual manufacturing process and during the quality assurance audit.*

The table of data attached as Q4-1 contains the production scale testing that has been completed on the intermediate. The data is more extensive than the lab-scale analysis presented in question 3, and it confirmed the lab-scale results showing that PCBs are formed at low levels in the DAZN manufacture. This material was not offered for sale and was not subject to the quality assurance audit.

The tables of data attached as Q4-2 contain the product testing that has been completed on the final blends of product. The data is presented in 3 sections the first of which is the preliminary result of the Quality Assurance Audit which was the initial sampling for Red 144 and Red 214. Concerns were raised that the initial result showed interference from a non-PCB chemical eluting in a similar time on the GC. The second table shows confirmation testing of the preliminary results. The third table documents the information generated after the discovery of contamination through the confirmation testing program implemented by Clariant.

A spreadsheet showing analytical results of batch production is attached as Q4-3. As we discussed in our earlier meeting, batches are generally mixed to form a blend which is the commercial product. This blending is done for coloristic properties.

Question 5 *Documentation of activities conducted to date following the determination that PCBs had exceeded 50 parts per million in the products. This should include information regarding handling, storage, marking, etc. of the products and decontamination efforts, if applicable.*

At the Coventry site the Azo building produces the intermediate (DAZN) and packaged the final product for sale to customers. The packaging operation was moved to the Clariant Mexico plant in June of 2003. The Coventry packaging operation had not processed the Red 214 or 144 since June when the process was moved. The manufactured intermediate, DAZN, did not exceed regulatory limits during the length of production. The building was checked for material using both the inventory control system and a physical inspection. There was no intermediate or final product present. The equipment was cleaned with the work being done under the health and safety procedures cited above in response to question two. There have been no further manufacturing activities in this building for Pigment Red 144 and Red 214 since the discovery of the PCB issue.

Several employee meetings have been conducted with employees in all areas of the plant. These meetings included information on the manufacturing process, general PCB information, PCB health and safety information, regulatory information and an update on the commercial aspect of this issue. Additional job specific training was conducted for employees who could potentially work with this product.

The HPP building, which houses the second step of the process, stopped manufacturing the product during a production run. The process equipment was stopped and no new reactants charged. There was material in the filter press, the steam strip kettle, the distillation still and in a receiver at the time of discovery. The process is a completely closed system until the filter press step and the still bottoms pack out stage.

The product that was in the production system was sampled and sent to the lab for PCB analysis. These results are also contained in the response for Q3-4, USEA001415, USEA001416. The material on the filter press analyzed at below 50 ppm, as did the product in the steam stripper. These materials have been packaged as press cake and are now in the PCB management area in the site's HiRise Warehouse. The material that was in the still was packed out, using appropriate PPE, and is being managed as PCB waste. The equipment was "solvent batched," which is the process of running a solvent through the equipment to decontaminate the process equipment. The filter press has been decontaminated according to 40 CFR 761 requirements by Clariant's vendor, Clean Harbors.

The HiRise warehouse is where the materials with PCBs are now all located on site. A site map is attached as Q5-1. The material is being managed according to the requirements of §40 CFR 761.65. Additional training has been provided to the

warehouse employees regarding working with potentially PCB containing material. Training included spill response procedures for PCB containing material.

The HiRise Warehouse meets the following criteria:

a. There are adequate roof and walls to prevent rain water from reaching the stored product
b. There is an adequate floor that has continuous curbing installed.
c. The floor and curbing provide a containment volume that is 220 cu feet. This is greater than 2 times the largest container, (approximately 25 cubic feet) and greater than 25% of the total volume, approximately 800 cubic feet.
d. There are no drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area;
e. The floors are constructed with a smooth surface, finished concrete.
f. The installed curb has sealed continuous nonporous surface.
g. The warehouse is not below the 100-year flood water elevation.

There are small amounts of material that was in laboratories and support areas. This material has been quarantined and labeled. A sample label is attached as Q5-2. Additional training was conducted for the laboratory employees regarding working with potentially PCB containing material. This included spill procedures for PCB containing material as well as waste disposal requirements.

Samples of Red 144/214 sent for analysis

#	Sample	Source	Date Sent	Date Received	Results PPM
Original samples sent as part of QA Audit					
3B	Red 3B USEA000164	Blend: tested in Charlotte	6/20/2003	7/8/2003	502
3B	Red 3B USEA000165	Blend: tested in Charlotte	6/20/2003	7/8/2003	427
3B	Red 3B USEA000166	Blend: tested in Charlotte	6/20/2003	7/8/2003	386
BNP	Red BNP US63268101	Blend: tested in Charlotte	6/20/2003	7/8/2003	76
BNP	Red BNP US63268102	Blend: tested in Charlotte	6/20/2003	7/8/2003	116
BNP	Red BNP US63268103	Blend: tested in Charlotte	6/20/2003	7/8/2003	108
BNP	Red BNP US63268104	Blend: tested in Charlotte	6/20/2003	7/8/2003	203
Confirmation of original QA Audit results					
3B	Red 3B USEA000165	Blend: tested in Germany	7/15/2003	9/9/2003	600
BNP	Red BNP 63385705	Blend; tested in Germany	7/15/2003	9/9/2003	660
Results from post discovery investigation					
3B	Red 3B USEA000302	Blend: tested in Charlotte	9/12/2003	9/14/2003	814
3B	Red 3B USEA000303	Blend: tested in Charlotte	9/12/2003	9/14/2003	843
BNP	Red BNP 63385701	Blend: tested in Charlotte	9/12/2003	9/14/2003	557
BNP	Red BNP 63385702	Blend: tested in Charlotte	9/12/2003	9/14/2003	389
BNP	Red BNP 63385703	Blend: tested in Charlotte	9/12/2003	9/14/2003	700
BNP	Red BNP 63385704	Blend: tested in Charlotte	9/12/2003	9/14/2003	596
BNP	Red BNP 63385706	Blend: tested in Charlotte	9/12/2003	9/14/2003	666
BNP	Red BNP MXSC313501	Blend: tested in Charlotte	9/12/2003	9/14/2003	455
BNP	Red BNP MXSC313502	Blend: tested in Charlotte	9/12/2003	9/14/2003	415
BNP	Red BNP US6319101	Blend: tested in Charlotte	9/15/2003	9/17/2003	19
BNP	Red BNP US6319102	Blend: tested in Charlotte	9/15/2003	9/17/2003	34

Dick Fischer 11/07/2000 01:12 PM

To: Richard Castenson/CLARIANT@CLARIANT, David Brunetti/CLARIANT@CLARIANT, Ralph Svenningsen/CLARIANT@CLARIANT
cc:
Subject: PCB results

Rich,

Tetrachlorobiphenyl/Trichlorobiphenyl results

Comments		Charlotte	Utah
REDACTED RESULTS OF UNRELATED TESTING			
Nov. Red BN D. Brunetti	1726-85	11.58/1.16	1.8/ND
Nov. Red BN Pilot Plant	1726-154	1.49/<0.2	6.5/ND
DAZN Methacrylamide	1724-106-1	7.32/0.29	8.3/ND
DAZN	1724-106-2	8.87/0.40	6.8/ND

Not bad agreement. Data Chem has a 3 page report which I shall bring to you.

Dick

Pigment 144/214 Analysis

	Samples sent for analysis				
		Production		Date sent	Results
#	Sample	in SAP	source	to Lab	PPM
1	Red BNP 6213701	08/15/01	Batch	9/24/2003	20
2	Red BNP 6213702 (9-2001)	09/19/01	Batch	9/12/2003	22
3	Red BNP 6213703	10/02/01	Batch	9/24/2003	43
4	Red BNP 6213704	10/05/01	Batch	9/24/2003	32
5	Red BNP 6213706	02/14/02	Batch	9/23/2003	107
6	Red BNP 62253701	04/15/02	Batch	9/23/2003	47
7	Red BNP 62253702	04/29/02	Batch	9/18/2003	113
8	Red BNP 62253703	04/30/02	Batch	9/23/2003	52
9	Red BNP 62253705	06/25/02	Batch	9/23/2003	108
10	Red BNP 62253707	06/28/02	Batch	9/23/2003	119
11	Red BNP 62253708	07/19/02	Batch	9/23/2003	102
12	Red BNP 62253709	07/19/02	Batch	9/23/2003	280
13	Red BNP 62253710	08/05/02	Batch	9/23/2003	104
14	Red BNP 62253711	08/12/02	Batch	9/18/2003	82
15	Red BNP 62253712	08/16/02	Batch	9/12/2003	255
16	Red BNP 62253713	08/21/02	Batch	9/23/2003	85
17	Red BNP 62253714	08/27/02	Batch	9/23/2003	87
18	Red BNP 62253715	08/30/02	Batch	9/23/2003	112
19	Red BNP 62253716	09/10/02	Batch	9/24/2003	146
20	Red BNP 62253717	09/16/02	Batch	9/23/2003	180
21	Red BNP 62253718	09/19/02	Batch	9/23/2003	424
22	Red BNP 62253719	09/24/02	Batch	9/18/2003	528
23	Red BNP 62253720	09/27/02	Batch	9/23/2003	237
24	Red BNP 62253721	09/30/02	Batch	9/18/2003	248
25	Red BNP 62253722	10/08/02	Batch	9/23/2003	323
26	Red BNP 62253723	10/11/02	Batch	9/23/2003	335
27	Red 3B 62254101	11/5/2002	Batch	9/23/2003	2034
28	Red 3B 62254102	11/19/2002	Batch	9/23/2003	858
29	Red 3B 62254103	11/19/2002	Batch	9/23/2003	606
30	Red 3B 62254103	11/19/2002	Batch	9/18/2003	470
31	Red 3B 62254104	12/3/2002	Batch	9/23/2003	277
32	Red 3B 62254105	12/13/2002	Batch	9/23/2003	256
33	Red 3B 62254106	12/18/2002	Batch	9/23/2003	476
34	Red BNP 62313801	01/20/03	Batch	9/23/2003	555
35	Red BNP 62313802	02/03/03	Batch	9/18/2003	619
36	Red BNP 6R313803-EC	02/24/03	Batch	9/10/2003	273
37	Red BNP 6R313804-EC	02/27/03	Batch	9/10/2003	213
38	Red BNP 6R313805-C	02/28/03	Batch	9/10/2003	182
39	Red BNP 6R313805-EC	02/28/03	Batch	9/10/2003	203
40	Red BNP 6R313806-C	03/11/03	Batch	9/10/2003	532
41	Red BNP 6R313807-EC	03/11/03	Batch	9/10/2003	239
42	Red BNP 6R313808-EC	03/17/03	Batch	9/10/2003	359
43	Red BNP 6R313809-C	03/18/03	Batch	9/10/2003	1061
44	Red BNP 6R313810-C	03/20/03	Batch	9/10/2003	421
45	Red BNP 62313811	03/25/03	Batch	9/29/2003	493
46	Red BNP 62313812	04/09/03	Batch	9/23/2003	115
47	Red BNP 62313813	04/09/03	Batch	9/29/2003	296
48	Red BNP 62313814	04/09/03	Batch	9/29/2003	532

data response Q4-3 batches

Pigment 144/214 Analysis

	Samples sent for analysis				
		Production		Date sent	Results
#	Sample	in SAP	source	to Lab	PPM
1	Red BNP 6213701	08/15/01	Batch	9/24/2003	20
2	Red BNP 6213702 (9-2001)	09/19/01	Batch	9/12/2003	22
3	Red BNP 6213703	10/02/01	Batch	9/24/2003	43
4	Red BNP 6213704	10/05/01	Batch	9/24/2003	32
5	Red BNP 6213706	02/14/02	Batch	9/23/2003	107
6	Red BNP 62253701	04/15/02	Batch	9/23/2003	47
7	Red BNP 62253702	04/29/02	Batch	9/18/2003	113
8	Red BNP 62253703	04/30/02	Batch	9/23/2003	52
9	Red BNP 62253705	06/25/02	Batch	9/23/2003	108
10	Red BNP 62253707	06/28/02	Batch	9/23/2003	119
11	Red BNP 62253708	07/19/02	Batch	9/23/2003	102
12	Red BNP 62253709	07/19/02	Batch	9/23/2003	280
13	Red BNP 62253710	08/05/02	Batch	9/23/2003	104
14	Red BNP 62253711	08/12/02	Batch	9/18/2003	82
15	Red BNP 62253712	08/16/02	Batch	9/12/2003	255
16	Red BNP 62253713	08/21/02	Batch	9/23/2003	85
17	Red BNP 62253714	08/27/02	Batch	9/23/2003	87
18	Red BNP 62253715	08/30/02	Batch	9/23/2003	112
19	Red BNP 62253716	09/10/02	Batch	9/24/2003	146
20	Red BNP 62253717	09/16/02	Batch	9/23/2003	180
21	Red BNP 62253718	09/19/02	Batch	9/23/2003	424
22	Red BNP 62253719	09/24/02	Batch	9/18/2003	528
23	Red BNP 62253720	09/27/02	Batch	9/23/2003	237
24	Red BNP 62253721	09/30/02	Batch	9/18/2003	248
25	Red BNP 62253722	10/08/02	Batch	9/23/2003	323
26	Red BNP 62253723	10/11/02	Batch	9/23/2003	335
27	Red 3B 62254101	11/5/2002	Batch	9/23/2003	2034
28	Red 3B 62254102	11/19/2002	Batch	9/23/2003	858
29	Red 3B 62254103	11/19/2002	Batch	9/23/2003	606
30	Red 3B 62254103	11/19/2002	Batch	9/18/2003	470
31	Red 3B 62254104	12/3/2002	Batch	9/23/2003	277
32	Red 3B 62254105	12/13/2002	Batch	9/23/2003	256
33	Red 3B 62254106	12/18/2002	Batch	9/23/2003	476
34	Red BNP 62313801	01/20/03	Batch	9/23/2003	555
35	Red BNP 62313802	02/03/03	Batch	9/18/2003	619
36	Red BNP 6R313803-EC	02/24/03	Batch	9/10/2003	273
37	Red BNP 6R313804-EC	02/27/03	Batch	9/10/2003	213
38	Red BNP 6R313805-C	02/28/03	Batch	9/10/2003	182
39	Red BNP 6R313805-EC	02/28/03	Batch	9/10/2003	203
40	Red BNP 6R313806-C	03/11/03	Batch	9/10/2003	532
41	Red BNP 6R313807-EC	03/11/03	Batch	9/10/2003	239
42	Red BNP 6R313808-EC	03/17/03	Batch	9/10/2003	359
43	Red BNP 6R313809-C	03/18/03	Batch	9/10/2003	1061
44	Red BNP 6R313810-C	03/20/03	Batch	9/10/2003	421
45	Red BNP 62313811	03/25/03	Batch	9/29/2003	493
46	Red BNP 62313812	04/09/03	Batch	9/23/2003	115
47	Red BNP 62313813	04/09/03	Batch	9/29/2003	296
48	Red BNP 62313814	04/09/03	Batch	9/29/2003	532

data response Q4-3 batches

DAZN monitoring results

#	Sample	Source	Date Sample sent to lab	Results PPM
DAZN	DAZN USEA000669	Azo	8/22/2003	4.5
DAZN	DAZN USEA000672	Azo	9/10/2003	4.1
DAZN	DAZN USEA000674	Azo	8/22/2003	4.3
DAZN	DAZN USEA000675	Azo	8/22/2003	2.6
DAZN	DAZN 6303251	Azo	11/20/2000	5.1
DAZN	DAZN 6303252	Azo	11/20/2000	7.9
DAZN	DAZN 6303253	Azo	11/20/2000	5.4
DAZN	DAZN 6303254	Azo	11/20/2000	5.3
DAZN	DAZN 6303255	Azo	11/20/2000	4.8
DAZN	DAZN 6303256	Azo	11/20/2000	4.9
DAZN	DAZN 6303257	Azo	11/20/2000	2.5
DAZN	DAZN 6312852	Azo	3/2/2001	8.6
DAZN	DAZN 6312854	Azo	3/2/2001	8.4
DAZN	DAZN 6312855	Azo	3/2/2001	6.1
DAZN	DAZN 6312858	Azo	3/2/2001	7.9
DAZN	DAZN 6312862	Azo	3/16/2001	5.6
DAZN	DAZN 6312865	Azo	3/16/2001	2.2
DAZN	DAZN 6312867	Azo	3/16/2001	14.8
DAZN	DAZN 6312869	Azo	3/16/2001	6.6
DAZN	DAZN 6312874	Azo	3/16/2001	3.2

Question 4 *Analytical data collected on PCB concentrations in the intermediate and final stages of the product manufacturing process during actual manufacturing process and during the quality assurance audit.*

The table of data attached as Q4-1 contains the production scale testing that has been completed on the intermediate. The data is more extensive than the lab-scale analysis presented in question 3, and it confirmed the lab-scale results showing that PCBs are formed at low levels in the DAZN manufacture. This material was not offered for sale and was not subject to the quality assurance audit.

The tables of data attached as Q4-2 contain the product testing that has been completed on the final blends of product. The data is presented in 3 sections the first of which is the preliminary result of the Quality Assurance Audit which was the initial sampling for Red 144 and Red 214. Concerns were raised that the initial result showed interference from a non-PCB chemical eluting in a similar time on the GC. The second table shows confirmation testing of the preliminary results. The third table documents the information generated after the discovery of contamination through the confirmation testing program implemented by Clariant.

A spreadsheet showing analytical results of batch production is attached as Q4-3. As we discussed in our earlier meeting, batches are generally mixed to form a blend which is the commercial product. This blending is done for coloristic properties.

CLARIANT PA DIVISION CUSTOMERS
THAT PURCHASED
CONTAMINATED RED PIGMENT

COMPANY SANITIZED COPY

PA Customer Name	Street	City/State/Zip	Contact Name	Contact Phone

CLARIANT PA DIVISION CLARIANT PA DIVISION
CUSTOMER SHIPMENT DETAIL

COMPANY SANITIZED COPY

CUSTOMER	SHIP DATE	POUNDS	PCB (ppm)
	08/22/2002	44	34
	09/06/2002	44	76
	10/19/2002	88	116
	10/19/2002	44	116
	12/05/2002	88	116
	01/08/2003	44	116
	01/24/2003	88	108
	03/14/2003	44	596
	03/21/2003	88	596
	03/25/2003	44	389
	04/25/2003	44	660
	05/07/2003	88	660
	05/07/2003	44	660
	05/23/2003	88	660
	06/17/2003	132	666
	08/22/2003	88	455
	06/13/2003	572	386
	06/23/2003	1,320	386
	08/27/2003	440	386
	08/27/2003	880	814
	09/03/2003	880	814
	05/02/2002	110	19
	10/28/2002	220	108
	08/26/2002	440	76
	10/02/2002	440	116
	10/11/2002	660	108
	12/19/2002	1,760	203
	03/25/2003	286	596
	03/25/2003	594	660
	05/01/2003	1,320	660
	05/01/2003	1,320	666
	06/02/2003	1,320	666
	06/28/2003	64	19
	06/28/2003	20	666
	08/21/2003	11	660
	08/21/2003	902	666
	12/11/2001	22	34
	05/02/2002	88	19
	06/05/2002	44	19
	08/06/2002	44	34
	08/13/2002	88	19
	10/19/2002	616	108
	10/23/2002	44	76
	10/23/2002	88	116
	11/14/2002	88	108
	12/10/2002	44	108
	12/30/2002	660	108

COMPANY SANITIZED COPY

CUSTOMER	SHIP DATE	POUNDS	PCB (ppm)
	01/10/2003	44	116
	01/27/2003	132	34
	01/30/2003	44	34
	01/31/2003	440	116
	02/05/2003	44	116
	02/10/2003	2	389
	02/14/2003	528	389
	02/27/2003	43	34
	02/27/2003	20	389
	02/27/2003	66	596
	03/14/2003	1,694	389
	03/18/2003	88	596
	03/18/2003	44	596
	03/31/2003	198	389
	04/29/2003	44	660
	04/30/2003	1	666
	05/09/2003	132	660
	05/14/2003	88	660
	05/22/2003	88	660
	06/04/2003	3,001	502
	06/19/2003	2	814
	06/19/2003	2	843
	06/19/2003	1,001	843
	06/20/2003	550	389
	06/26/2003	44	660
	07/18/2003	211	502
	07/18/2003	3,518	843
	08/19/2003	1,364	502
	08/19/2003	2,640	427
	05/02/2002	22	19
	10/28/2002	88	108
	11/26/2002	264	203
	03/24/2003	264	596
	07/11/2003	1,056	502
	12/7/2001	1	22
	10/1/2002	270	528
	11/12/2002	537	248
	06/27/2003	237	694
	04/23/2003	10	660
	06/20/2003	11	660
	06/20/2003	33	666
	07/17/2003	3	502
	08/30/2002	44	76
	10/02/2002	44	76
	02/20/2003	44	389
	02/11/2002	176	19
	05/09/2002	176	19

COMPANY SANTIZED COPY

CUSTOMER	SHIP DATE	POUNDS	PCB (ppm)
	07/25/2002	176	19
	09/04/2002	176	76
	09/13/2002	176	76
	09/19/2002	176	108
	10/02/2002	176	108
	10/22/2002	88	108
	11/07/2002	176	203
	11/20/2002	176	203
	01/07/2003	176	108
	02/10/2003	176	203
	05/03/2002	220	19
	06/10/2002	220	34
	07/24/2002	132	19
	07/26/2002	330	34
	08/19/2002	550	34
	10/24/2002	88	116
	11/08/2002	22	19
	11/08/2002	66	108
	12/11/2002	88	108
	01/08/2003	308	34
	03/13/2003	440	596
	04/23/2003	264	660
	04/25/2003	264	660
	05/13/2003	220	660
	05/22/2003	220	660
	04/23/2003	88	660
	05/30/2003	528	666
	11/20/2001	149	22
	7/30/2002	269	113
	11/7/2002	528	248
	12/5/2001	1,048	22
	5/3/2002	1,049	113
	5/15/2002	1,524	82
	1/20/2003	5	470
	3/21/2003	17	619
	08/19/2003	1,513	116
	08/19/2003	1,480	53
	08/30/2002	2,200	76
	09/30/2002	1,210	76
	09/30/2002	352	116
	10/07/2002	660	116
	10/31/2002	1,188	116
	11/27/2002	660	116
	11/27/2002	330	108
	12/30/2002	1,320	108
	02/28/2003	2,640	557
	02/28/2003	440	389

CONFIDENTIAL BUSINESS INFORMATION

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COMPANY SANTIZED COPY

CUSTOMER	SHIP DATE	POUNDS	PCB (ppm)
	03/31/2003	1,804	700
	03/31/2003	792	596
	04/29/2003	308	700
	04/29/2003	528	596
	05/29/2003	1,320	700
	05/29/2003	88	596
	06/16/2003	484	666
	06/30/2003	88	660
	06/30/2003	220	660
	07/01/2003	616	666
	07/17/2003	6	502
	08/29/2003	1,672	455
	08/29/2003	1,210	415

CLARIANT SECOND-TIER CUSTOMER AND END USE DATA

COMPANY SANITIZED COPY

Clariant PA Division Customer Name	2nd Tier Customer Name	Customer Street	Customer City/State/Zip	Contact Name	Contact Telephone	Product Sold	Dates Sold (Quantity Sold)	Weight % Pigment in Product (PCB conc. ppm)	End Use	Weight % Pigment in End Use (PCB conc. ppm)

12/1/2003